EFS-Web Receipt date: 03/22/2006

10573239 - GAU: 2815

IAP20 Rec'd PCT/PTO 22 MAR 2006

PTO/SB/08A (07-05)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons ere required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449/PTO	Complete if Known		
	Application Number	111/5/5659	
INFORMATION DISCLOSURE	Filing Date	March 22, 2006	
	First Named Inventor	Artemi MARTSINOVSKY	
STATEMENT BY APPLICANT	Art Unit		
(Use as many sheets as necessary)	Examiner Name		
Sheet 1 of 2	Attorney Docket Number	12096.PCT.US	

			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (# known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
/J.K./		^{US-} US-6,417,060-B2	07/09/2002	Tavkhelidze et al.	
		US-			
		US-			
		US-	 		
		US-			-
		US-	-		
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			-
		US-	 		
		US-			
		US-	1		
		US-			

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Foreign Patent Document	n Patent Document Publication Name of Pat Date Applicant of Cite MM-DAYYY	Name of Patentee or	Peges, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	Т	
		Country Code ³ "Number ⁴ "Kind Code ³ (if known)		Applicate of oned bocoment		T⁵	
	ļ <u>.</u>						
	<u> </u>						
	ļ .						
	 -						
	 						
	L		1				

Eveniese			
Examiner	/Jay Kim/	Date	00/4 4/0000
Signature	/ody ixiii/		03/14/2008
Oignature		Considered	00/ 1/2000

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. The reign of the reign of the translation of the year of the reign of the Emperor must precede the senal number of the patent document. Skind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language

Trainstation is anacreed.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450.

To: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

IAP20 RECUPETATO 22 MAR 2006

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Tradamark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449/PTO		Complete if Known			
				Application Number	401277770
			CLOSURE	Filing Date	March 22,2006 7 3 2 3 9
STA	STATEMENT BY APPLICANT			First Named Inventor	Artemi MARTSINOVSKY
(Use as many sheets as necessary)			ecessary)	Art Unit	
(cot as many chaosa as madesastry)		Examiner Name			
Sheet	2	of	2	Attorney Docket Number	12096.PCT.US

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²		
/J.K./		KOROTKOV et al., "Possible cooling by resonant Fowler- Nordheim emission", Applied Physics Letters, 18 October 1999, pp. 2491-2493, Vol. 75 No. 16, American Institute of Physics, USA.			
/J.K./		CUTLER et al., "New Results on Microelectronic Cooling Using the Inverse Nottingham Effect. Low temperature Operation and Efficiency", Electrochemical Society Proceedings, November 2000, pp. 99-111, Volume 2000-28, Electrochemical Society, USA.			
/J.K./		HISHINUMA et al., "Refrigeration by combined tunneling and thermionic emission in vacuum: Use of nanometer scale design", Applied Physics Letters, 23 April 2001, pp. 2572-2574, Vol. 78 No. 17, American Institute of Physics, USA.			
/J.K./		HISHINUMA et al., "Vacuum thermionic refrigeration with a semiconductor heterojunction structure", Applied Physics Letters, 25 November 2002, pp. 4242-4244, Vol. 81 No. 22, American Institute of Physics, USA.			
/J.K./		HISHINUMA et al., "Measurements of cooling by room- temperature thermionic emission across a nanometer gap", Applied Physics Letters, 1 October 2003, pp. 4690-4696, Vol. 94 No. 7, American Institute of Physics, USA.			

Evamines			
Examiner	/Jay Kim/	Date	00/4//0000
Signatura	70dy (1817)	Date	03/14/2008
Signature	•	Considered	
*EYAMINED: I	wind if	Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.